

REMARKS

By this Amendment, Applicants amend claims 1, 7, 8, 12, 13, and 20. Applicants cancel claims 2-6, 9-11, and 14-19 without prejudice or disclaimer of the subject matter thereof. Applicants also add new claims 21 and 22 to address other aspects of the present invention. Upon entry of this Amendment, claims 1, 7, 8, 12, 13, and 20-22 will be pending.

In the Office Action, the Examiner rejected claims 1-3, 6-9, and 12-20 under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 5,944,802 to Bello et al. ("Bello"); alternatively rejected claims 1-3, 6-9, and 12-20 under 35 U.S.C. § 103(a) as obvious over Bello; and rejected claims 4, 5, 10, and 11 under 35 U.S.C. § 103(a) as unpatentable over Bello in view of common knowledge in the art.¹ Applicants respectfully traverse the rejections under both § 102 and 103.

Regarding Claim Rejection under 35 U.S.C. § 102(b)

Applicants respectfully traverse the Examiner's rejection of claims 1-3, 6-9, and 12-20 under 35 U.S.C. § 102(b) as anticipated by Bello. In order to anticipate Applicant's claimed invention under 35 U.S.C. § 102, each and every element of the claim in issue must be found, either expressly described or under principles of inherency, in a single prior art reference. Further, "[t]he identical invention must be shown in as complete detail as is contained in the . . . claim." See M.P.E.P. § 2131, quoting Richardson v. Suzuki Motor Co., 868 F.2d 1126, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989).

¹ The Office Action contains a number of statements reflecting characterizations of the related art and the claims. Regardless of whether any such statement is identified herein, Applicants decline to automatically subscribe to any statement or characterization in the Office Action.

Independent claim 1, as amended, recites a combination including, for example, “a control unit configured to start up the second storage device when the remaining time calculated by the calculation unit reaches the startup time held by the startup time holding unit.” Bello fails to disclose at least the above element as recited in amended claim 1.

Bello teaches a buffer system 100 for “the transfer of data from a host unit 106 via a high speed data channel 108 to an I/O unit 102.” Bello, column 4, lines 7-9. “A buffer device 104 is used to store at least a portion of a data block or data file being transferred from the host unit 106 to the I/O unit 102. The host unit 106 is interfaced with data channel 108.” Bello, column 4, lines 12-18. “A time reduction is realized by monitoring the current data transfer between the data channel and a buffer device to establish a transfer rate. The transfer rate is used to anticipate and coordinate the transfer of last bit of data from the data channel to coincide with the receipt of the data by the input/output (I/O) unit, effectively eliminating buffer device delay and allowing the host unit to be released from performing the data transfer.” Bello, abstract. However, Bello's teaching of reducing delay between host device host unit 106 and I/O unit 102 does not constitute “a control unit configured to start up the second storage device when the remaining time calculated by the calculation unit reaches the startup time held by the startup time holding unit,” as recited in amended claim 1 (emphasis added).

The Examiner alleged that Bello teaches the claimed limitations of “[a] control unit configured to start up the second storage device when the remaining time calculated by the calculation unit reaches a predetermined time” with “[f]eature of elements of between (102 & 106).” (Office Action at 2). Applicants respectfully

disagree. Bello explicitly states that “[u]pon the threshold compare the unload address is switched to memory address bus 134 by the unload 132 and data ready 130 is supplied to I/O unit 102.” Bello, column 4, lines 39-42, emphasis added. However, supplying data ready signal to I/O unit 102 does not constitute “a control unit configured to start up the second storage device,” as recited in claim 1.

Therefore, Bello fails to disclose each and every element of claim 1, either explicitly or inherently. Bello thus cannot anticipate Applicants’ invention as recited in claim 1 under 35 U.S.C. § 102. Accordingly, Applicants respectfully request withdrawal of the Section 102 rejection of claim 1. Because claims 7 and 8 depend from claim 1, Applicants also request withdrawal of the Section 102 rejection of claims 7 and 8 for at least the same reasons stated above.

Further, independent claims 12, 13, and 20, while of different scope, recite similar language to that of claim 1. Claims 12, 13, and 20 are therefore also allowable for at least the same reasons stated above. Applicants respectfully request withdrawal of the Section 102 rejection of claims 12, 13, and 20.

Because claims 2, 3, 6, 9, and 14-19 have been canceled, the Section 102 rejection of claims 2, 3, 6, 9, and 14-19 is moot.

Regarding Claim Rejection under 35 U.S.C. § 103

Applicants respectfully traverse the Examiner’s alternative rejection of claims 1-3, 6-9, and 12-20 under 35 U.S.C. § 103 as unpatentable over Bello. In order to establish a *prima facie* case of obviousness, three basic criteria must be met. First, the prior art reference (or references when combined) must teach or suggest all the claim elements. Second, there must be some suggestion or motivation, either in the references

themselves or in the knowledge generally available to one of ordinary skill in the art, to modify a reference or to combine reference teachings. Third, there must be a reasonable expectation of success. See M.P.E.P. § 2143. At least the first two requirements have not been met.

As explained above, Bello fails to teach or suggest at least “a control unit configured to start up the second storage device when the remaining time calculated by the calculation unit reaches the startup time held by the startup time holding unit,” as recited in amended claim 1 (emphasis added). Thus, the cited references fail to teach each and every element of claim 1.

Moreover, Bello explicitly states that “the problem solved by the current invention lies in attempting to arrange a data transfer to the I/O unit 102 from the buffer device 104 to finish at substantially the same time as the data channel 108 transfers the last data bit to the buffer device 104.” Bello, column 5, lines 28-32, emphasis added. Bello thus teaches away from Applicants’ claimed invention as recited in claim 1. Therefore, one of ordinary skill in the art would not have been motivated to modify the reference.

Therefore, a *prima facie* case of obviousness has not been established with respect to independent claim 1. Claim 1 is therefore allowable over the prior art of record under 35 U.S.C. § 103. Accordingly, Applicants respectfully request withdrawal of the Section 103 rejection of claim 1. Because claims 7 and 8 depend from claim 1, Applicants also request withdrawal of the Section 103 rejection of claims 7 and 8 for at least the same reasons stated above.

Further, independent claims 12, 13, and 20, while of different scope, recite similar language to that of claim 1. Claims 12, 13, and 20 are therefore also allowable

for at least the same reasons stated above. Applicants respectfully request withdrawal of the Section 103 rejection of claims 12, 13, and 20.

Because claims 2, 3, 6, 9, and 14-19 have been canceled, the Section 103 rejection of claims 2, 3, 6, 9, and 14-19 is moot.

Applicants also respectfully traverse the Examiner's rejection of claims 4, 5, 10, and 11 under 35 U.S.C. § 103(a) as unpatentable over Bello in view of common knowledge in the art. Because claims 4, 5, 10, and 11 have been canceled, the Section 103 rejection of claims 4, 5, 10, and 11 is also moot.

Regarding Newly Added Claims 21 and 22

Applicants have added claims 21 and 22 to address other aspects of the present invention. Support for claims 21 and 22 may be found at, for example, pages 15-18 of the specification. Because claims 21 and 22 depend from claim 12, claims 21 and 22 are allowable for at least being dependent on an allowable base claim.

Conclusion

In view of the foregoing amendments and remarks, Applicants respectfully request reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge
any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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